

**We claim:**

1. A purified polynucleotide which encodes STR50.
- 5 2. The polynucleotide of claim 1 comprising consecutive nucleotides having a sequence as set forth in SEQ ID NO:1 and homologs or complements thereof.
- 10 3. The polynucleotide of claim 1 comprising consecutive nucleotides having a sequence as set forth in SEQ ID NO:3 and homologs or complements thereof.
- 15 4. The polynucleotide of claim 1 comprising consecutive nucleotides having a sequence as set forth from position 644 through position 3109 of SEQ ID NO:1 and homologs or complements thereof.
- 20 5. The polynucleotide of claim 1 comprising consecutive nucleotides having a sequence as set forth from position 644 through position 3019 of SEQ ID NO:3 and homologs or complements thereof.
6. A purified polynucleotide which encodes a polypeptide having the sequence set forth in SEQ ID NO:2.
- 25 7. A purified polynucleotide which encodes a polypeptide having the sequence set forth in SEQ ID NO:4.
8. A vector comprising a polynucleotide according to claim 1.
- 30 9. A cell comprising a vector according to claim 8.

10. An antisense polynucleotide complementary to the polynucleotide of claim 1.
11. A polynucleotide having between 10 and 922 consecutive nucleotides from position 1 to position 922 of SEQ ID NO:1.
12. A polynucleotide having between 10 and 766 consecutive nucleotides from position 1 to position 766 of SEQ ID NO:3.
- 10 13. Purified STR50.
14. The polypeptide of claim 13 comprising consecutive amino acids the sequence of which extends from position 1 through position 821 of SEQ ID NO:2.
- 15 15. The polypeptide of claim 13 comprising consecutive amino acids the sequence of which extends from position 1 through position 791 of SEQ ID NO:4.
- 20 16. A purified polypeptide encoded by the polynucleotide of claim 11.
17. A purified polypeptide encoded by the polynucleotide of claim 12.
18. A purified polypeptide according to claim 13, having the biological activity of modulating neurotoxic stress.
- 25 19. A purified polypeptide having at least 70% homology to, and retaining the biological activity of the polypeptide according to claim 18.
- 30 20. An antibody that binds to an epitope on the polypeptide of claim 13.

21. An antibody that binds to an epitope on the polypeptide of claim 14.
22. An antibody that binds to an epitope on the polypeptide of claim 15.
- 5 23. An antibody that binds to an epitope on the polypeptide of claim 19.